Remarks/Arguments:

Objections to the Specification

The abstract was objected to based on the language and form. The abstract is hereby amended. Applicant respectfully submits that the abstract is in proper form. Withdrawal of this objection is respectfully requested.

Objections to the Claims

Claim 6 was objected to for including the symbol "-". This symbol has been replaced by "," as suggested by the Examiner.

Claim 14 was objected to for including a "." on line 5. This "." has been removed as suggested by the Examiner.

Withdrawal of these objections are respectfully requested.

Claim Rejections Under 35 U.S.C. §112

Claims 1-10, 12-14, 32-40, 53 and 54, were rejected as being in a narrative format and failing to conform to US practice. Applicant respectfully submits that the claims as amended are clear and requests withdrawal of this rejection. If the Examiner has any further objections, it is requested that the Examiner specifically identify those objections.

Claims 1 and 21 were further objected to as being unclear as to whether the shrinkage disc unit and the tool were being claimed as a combination or subcombination. Each of the claims have been amended to recite an assembly including the components of the shrinkage disc unit and the tool. Withdrawal of this rejection is respectfully requested.

Claims 33 and 34 were each rejected as failing to provide proper antecedent basis for each limitation. Applicant respectfully submits that each claim as amended has proper antecedent basis for each limitation. Withdrawal of each of the rejections under 35 U.S.C. §112 is respectfully requested.

Claim Rejections Under 35 U.S.C. §102

Claims 1-10, 12-14, 33 and 37-40 stand rejected under 35 U.S.C. §102 as anticipated by U.S. Patent No. 4,979,842 (Miller et al.) Applicants traverse this rejection.

Anticipation requires that each and every limitation of the claim be disclosed, either expressly or under principles of inherency, in a single prior art reference. In re Robertson, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999). Absence from the reference of any claimed limitation negates anticipation. Rowe v. Dror, 42 USPQ2d 1550, 1553 (Fed. Cir. 1997).

Independent claim 1 recites "[a] shrinkage disc unit assembly, comprising:

a) a rotational body comprising a circumferential outer surface;

b) a hub surrounding the rotational body and comprising a circumferential inner surface which together with the circumferential outer surface forms an inclined joint between the rotational body and the hub, wherein the hub can be shrunk onto the rotational body at the joint;

c) a fluid channel leading through the rotational body or the hub, for charging the joint with a pressurized fluid;

d) and a fixing structure which is formed by one of the rotational body and the hub, alone or in combination with the other, and by means of which a tool can be axially supported either on the rotational body or the hub and fixed only in a predetermined rotational angular position on the rotational body and/or the hub, for assembling and/or disassembling the hub

wherein the rotational body and/or the hub is or are configured such that it is only possible to press a pressurized fluid into the joint when the tool is mounted at the predetermined rotational angular position on the rotational body and/or the hub."

As explained in the second paragraph on page 4 of the clean copy of the substitute specification, by configuring the tool and shrinkage disc unit such that the are fixed in a predetermined position, the present invention insures that the fluid passages are properly aligned and further restricts the axial movement of the hub itself.

The Office Action cites to pressure ring 1 of Miller et al. as equivalent to the recited hub and indicates that the hub is configured such that it is only possible to press a fluid pressurized fluid into the joint when the tool is properly mounted. The Office Action supports this by indicating that the fluid cannot enter the joint unless the ports 6 and 8 are aligned.

Applicant respectfully disagrees. Miller et al. explains at column 3, lines 23-32 that "[w]hen the pressure medium is supplied to the connecting opening 9, the flow of hydraulic fluid is distributed into the pressure medium channels 10 inside the clamping ring 3. Through these channels 10 the pressure medium flows between the cylindrical peripheral surfaces of the clamping ring 3 to the pressure rings 1 and then into the pressure medium channels 7 of the pressure rings 1, and then between the conical surfaces of the pressure rings 1 and the inner ring 2 to the pressure chamber 5 so as to act in the pressure chamber." (emphasis added). Miller et al. makes it clear that the fluid flows between the surfaces of the rings 1 and 3 and that therefore no alignment is necessary.

Furthermore, Miller et al. explains at column 3, lines 20-22, and shows in Figure 1 that the pressure medium channels 7 include circumferential grooves 6 at the ends thereof. Since the grooves 6 extend circumferentially about the surface of the clamping ring 3, the fluid will flow into the pressure medium channels 7 regardless of the rotational orientation of the components of Miller et al. with respect to one another.

Miller et al. does not teach or suggest a tool fixed only in a predetermined rotational angular position wherein the rotational body and/or the hub is or are configured such that it is only possible to press a pressurized fluid into the joint when the tool is mounted at the predetermined rotational angular position.

It is respectfully submitted that independent claim 1 is in condition for allowance. Claims 2-6, 9, 10, 32-39, 53 and 54 each depend from claim 1 and are therefore allowable for at least their dependency on allowable claim 1. It is respectfully submitted that each of the dependent claims recites additional limitations not taught or suggested by the prior art.

Additionally, withdrawn claims 11, 15-31, and 42-52 each depend from allowable generic claim 1 and therefore should be reinstated and allowed.

Similar to claim 1, independent claim 8 recites "[a] shrinkage disc unit assembly, comprising:

a) a conical circumferential outer surface formed by a rotational body;
b) a hub having a conical circumferential inner surface which is pushed onto the circumferential outer surface;
c) a tool, separate from the hub and the rotational body, for assembling and/or disassembling the hub relative to the rotational body;

wherein:

d) the tool is only connected to one of the rotational body and the hub in a non-positive and/or positive lock in a predetermined rotational angular position;
e) a joint between the conical circumferential outer surface and the conical circumferential inner surface is charged with a pressurized fluid for assembling and disassembling the hub and rotational body, wherein this can only be achieved when the tool is fastened to said one of the rotational body and the hub in the predetermined rotational angular position.

As explained above, Miller et al. does not teach or suggest a tool fixed only in a predetermined rotational angular position wherein the rotational body and/or the hub is or are configured such that it is only possible to press a pressurized fluid into the joint when the tool is mounted at the predetermined rotational angular position.

It is respectfully submitted that independent claim 8 is in condition for allowance. Claim 40 depends from claim 8 and is therefore allowable for at least its dependency on allowable claim 8. It is respectfully submitted that this dependent claim recites additional limitations not taught or suggested by the prior art.

It is respectfully submitted that each of the pending claims is in condition for allowance. Early reconsideration and allowance of each of the pending claims are respectfully requested.

If the Examiner believes an interview, either personal or telephonic, will advance the prosecution of this matter, the Examiner is invited to contact the undersigned to arrange the same.

Respectfully submitted,

Glenn M. Massina, Reg. No. 40,081
Attorney for Applicant

GMM/mc

Attachment: Abstract

Dated: November 30, 2009

☒ P.O. Box 980
Valley Forge, PA 19482
(610) 407-0700

☐ P.O. Box 1596
Wilmington, DE 19899
(302) 778-2500

The Director is hereby authorized to charge or credit Deposit Account No. **18-0350** for any additional fees, or any underpayment or credit for overpayment in connection herewith.